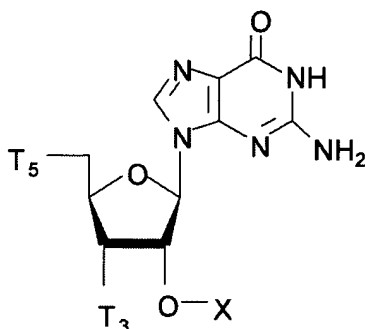


9. (amended twice) A compound having the structure:



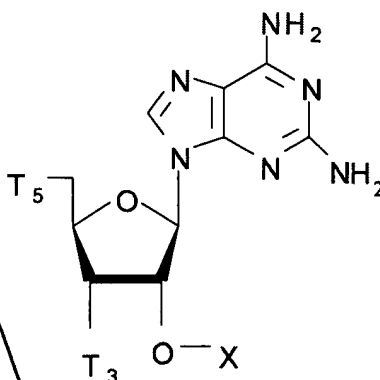
wherein X is $R_1-(R_2)_n$;

[R_1 is C_3-C_{20} alkyl, C_4-C_{20} alkenyl, or C_2-C_{20} alkynyl and n is 0; or] R_1 is C_1-C_{20} alkyl, C_2-C_{20} alkenyl, or C_2-C_{20} alkynyl and n is 1 to about 6;

R_2 is halogen, [hydroxyl, thiol, keto, carboxyl,] nitro, nitroso, nitrile, trifluoromethyl, trifluoromethoxy, O-alkyl, S-alkyl, NH-alkyl, N-dialkyl, O-aryl, S-aryl, NH-aryl, O-aralkyl, S-aralkyl, NH-aralkyl, [amino,] imidazole, N-phthalimido, azido, hydrazino, hydroxylamino, isocyanato, sulf-oxide, sulfone, sulfide, disulfide, silyl, aryl, heterocycle, carbocycle, intercalator, reporter molecule, conjugate, poly-amine, polyamide, polyalkylene glycol, polyether, a group that enhances the pharmacodynamic properties of oligonucleotides, or a group that enhances the pharmacokinetic properties of oligonucleotides; and

either one of T_3 and T_5 is OH, a hydroxyl blocking group, phosphate or an activated phosphate group and the other of T_3 and T_5 is a nucleotide or both T_3 and T_5 are nucleotides.

10. (amended twice) A compound having the structure:



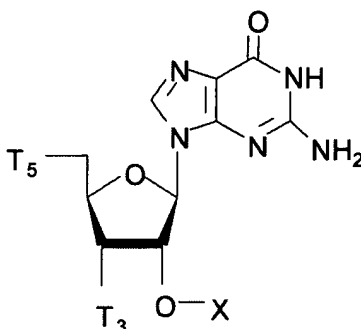
wherein X is $R_1-(R_2)_n$;

R_1 is C_1-C_{20} alkyl, C_4-C_{20} alkenyl, or C_2-C_{20} alkynyl;

R_2 is halogen, [hydroxyl, thiol, keto, carboxyl,] nitro, nitroso, nitrile, trifluoromethyl, trifluoromethoxy, O-alkyl, S-alkyl, NH-alkyl, N-dialkyl, O-aryl, S-aryl, NH-aryl, O-aralkyl, S-aralkyl, NH-aralkyl, [amino,] imidazole, N-phthalimido, azido, hydrazino, hydroxylamino, isocyanato, sulfide, sulfone, sulfide, disulfide, silyl, aryl, heterocycle, carbocycle, intercalator, reporter molecule, conjugate, polyamine, polyamide, polyalkylene glycol, polyether, a group that enhances the pharmacodynamic properties of oligonucleotides, or a group that enhances the pharmacokinetic properties of oligonucleotides;

either one of T_3 and T_5 is OH, a hydroxyl blocking group, phosphate or an activated phosphate group and the other of T_3 and T_5 is a nucleotide, or both T_3 and T_5 are nucleotides; and n is an integer from [0] 1 to about 6.

--26. A compound having the structure:



wherein X is $R_1-(R_2)_n$;

R_1 is C_3-C_{20} alkyl, C_4-C_{20} alkenyl, or C_2-C_{20} alkynyl and n is 0; or R_1 is C_1-C_{20} alkyl, C_2-C_{20} alkenyl, or C_2-C_{20} alkynyl and n is 1 to about 6;

R_2 is hydroxyl, thiol, keto, carboxyl, or amino; and either one of T_3 and T_5 is OH, a hydroxyl blocking group, phosphate or an activated phosphate group and the other of T_3 and T_5 is a nucleotide or both T_3 and T_5 are nucleotides.

27. A compound having the structure:

